Jefferson authorizes the Survey of the Coast

From the Research File

By Gaye Wilson

“AN ACT TO provide for surveying the coasts of the United States” was signed by President Thomas Jefferson on Feb. 10, 1807, and returned to Congress that same day. This bill had passed quickly through both houses with little debate, overcoming sectional rivalries with its potential benefits to the entire Atlantic seaboard plus portions of the Gulf Coast. The bill declared a very specific objective – a survey to result in complete and accurate charts of the entire coast of the United States – but it reflected larger issues that were of tremendous concern to the young nation: national boundaries, commerce, and defense.

The resolution for the coastal survey had been introduced in the House of Representatives by Samuel W. Dana of Connecticut. He noted that limited surveys had been made of the shores of Long Island Sound and North Carolina’s coast but that accurate charts of the entire coastline were greatly needed. Dana reasoned that these charts could secure the “lives of our seamen, the interest of our merchants and the benefits to revenue.” The resolution was assigned to the Committee of Commerce and Manufactures, but Dana added that the information gained could be useful in designating the maritime boundaries of the United States and so discourage “bellicose searches and seizures.”

The searches and seizures of American cargo and seamen was a growing dilemma. President Jefferson, supported by Congress, was intent upon remaining neutral as the wars in Europe escalated, but increasingly both Napoleonic France and Great Britain attempted to control the commercial shipping of neutral nations by sanctions and seizures. Britain’s fear of invasion by France and its desperate need for maritime control led to increased instances of impressments of American seamen into the Royal Navy.

Jefferson had appointed James Monroe and William Pinckney to the Court of St. James’s to negotiate a new treaty with England, but the treaty Jefferson received early in 1807 left the question of impressment unresolved and Jefferson refused to send it forward for ratification. Congress, meanwhile, continued to debate the best defense of U.S. ports, and on the same day Jefferson signed the bill for the coastal survey he sent a message to Congress requesting additional funding for shallow-draft gunboats to defend ports and harbors. Certainly more accurate charts of the coastline would be another step in defense.

A greater knowledge of the coast joined in the spirit of western exploration that had always engaged the imagination of the nation but that had become even more pronounced with the purchase of Louisiana in 1803. Jefferson’s sixth annual

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message to Congress, presented just two weeks before the coastal survey resolution, reviewed the accomplishments of Lewis and Clark’s trip to the Pacific, Thomas Freeman’s exploration of the Red River, and Zebulon Pike’s expedition up the Mississippi River. As Congress debated the scope of the coastal survey, Lewis and Clark reached Washington with the much awaited charts, reports, and various specimens from the West. At that moment, charts of distant western waterways exceeded what was accurately known of many areas of the long-settled eastern coast.

After signing the bill, President Jefferson moved immediately to solicit ideas for the coastal survey. As usual, he turned to men of science. Most were friends and colleagues who had provided counsel on previous explorations, including the Lewis and Clark expedition. He received advice on the survey along with recommendations that he consider employing Ferdinand R. Hassler, a recent immigrant from Switzerland who was gifted and well-trained in mathematics and surveying.

Hassler’s proposal for a trigonometric survey was ultimately selected. However, his plan required very sophisticated scientific instruments that were not available in the United States, and the start of work was delayed.

Jefferson, in fact, had already left the presidency and retired to Monticello before Hassler left for England in 1811 to oversee the design and manufacture of these needed instruments. Before he could return, prolonged tension between the United States and England escalated into declared war. Hassler remained in England throughout the War of 1812 and did not return until after peace was negotiated in 1815. It took another year and additional appropriations by Congress before the Survey of the Coast finally got under way.

Though the survey was delayed into his retirement, Jefferson kept up with its progress. In 1816 he assured Virginia’s governor, Wilson C. Nicholas, that the work of the national government would soon supply an accurate chart of the coast of Virginia. He knew of Hassler’s return from England and seemed especially proud that the United States now possessed a set of scientific instruments, “as never before crossed the Atlantic, and is scarcely possessed by any nation on the continent of Europe.”

The Survey of the Coast was born of the spirit and the necessities of 1807 and grew as the nation grew. With added responsibilities, it became the U.S. Coast and Geodetic Survey in 1878, and in 1965 it became a component of the Environmental Sciences Services Administration. Then in 1970, it was reorganized as the National Oceanic and Atmospheric Administration (NOAA). No doubt it would have been a point of pride with Jefferson to have played a part in the establishment of what is considered today the oldest scientific agency in the U.S. government.

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Ferdinand R. Hassler was the survey’s first director.
National Oceanic and Atmospheric Administration